

WHITEBOARD – How Muscles Grow!



The Process, Experience and “Expected Time” Development

-Understanding **The STAGES OF CHANGE** ladder to create HABIT; Pre-Contemplation, Contemplation, Preparation, Action, Maintenance, Rehabilitation and, Not Ideally, Termination

-Different types of Muscles in our body; Cardiac (Heart, **ANS**), Smooth (Walls of Internal Organs, **ANS**), Skeletal (**SNS**) - We CAN Exercise **CARDIAC & SKELETAL** (650 skeletal)

DRAW THIS, Explain Why REST is when Muscle(s) Grows!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	UPPER		LOWER		UPPER	
	LOWER		UPPER		LOWER	

1. Knowing **WHEN** to perform the specific stressful activities will encourage better timed development
2. Exercise **DAMAGES** Muscle Fibers, signaling body’s **REPAIR RESPONSE** (Lactic Acid → DOMS)
Fatigue Soreness
3. Muscles grow **AFTER** times of **STRESSFUL ACTIVITY**...
Muscle Tension → Metabolic Stress → Muscle Damage
4. Satellite Cells “Repair” Muscle Tissue with newly available and usable protein in our system (TIME)
5. **Rest** and **proper diet** helps growth in a BIG WAY!

Muscle Tension → Metabolic Stress → Muscle Damage → **REST & RESPECT** → **GROWTH**
~1-6 Days OFF/Workout (~4-7 Days/Muscle)

Muscle Fiber Types – Type 1 (Slow Twitch) – Aerobic, Long Distance, Time/Distance Measured
Type 2A (Fast Twitch) – Compound Movement / Hypertrophy, Rep Measured*
Type 2B (Fast Twitch) – Heavy Lifters / Power / Strength, Weight Measured*

-Hormones and Growth – Testosterone, Estrogen

Why AGE MATTERS! (Especially at the BEGINNING of Creating HABITS)

-Based on whether you have Exercise experience or not; Amount of Time NOT Active Dictates Time it will take to **RE-ESTABLISH / INITIALLY CREATE** Muscle Growth & Strength Ability / Skill-sets

-The longer you go **WITHOUT EXERCISING** (Measuring Life Long), The **MORE PROBLEMS** you can actually create for yourself

-Time Based Muscular Atrophy Due to **Inactivity**:
- Muscle/Joint Weakness, Tightness/Instability
- Loss of General Ability, Strength, ADLs
- Poor Circulation due to Lack of Skeletal Muscle
- Increased risk of Developing: Osteoporosis, Hypertension, Cancers, Heart Disease, Type 2 Diabetes, Workplace Injuries, Slower Metabolism
- Decreased Sleep Quality, Libido, Energy, Immune Response, Mental Health, Physical Ability